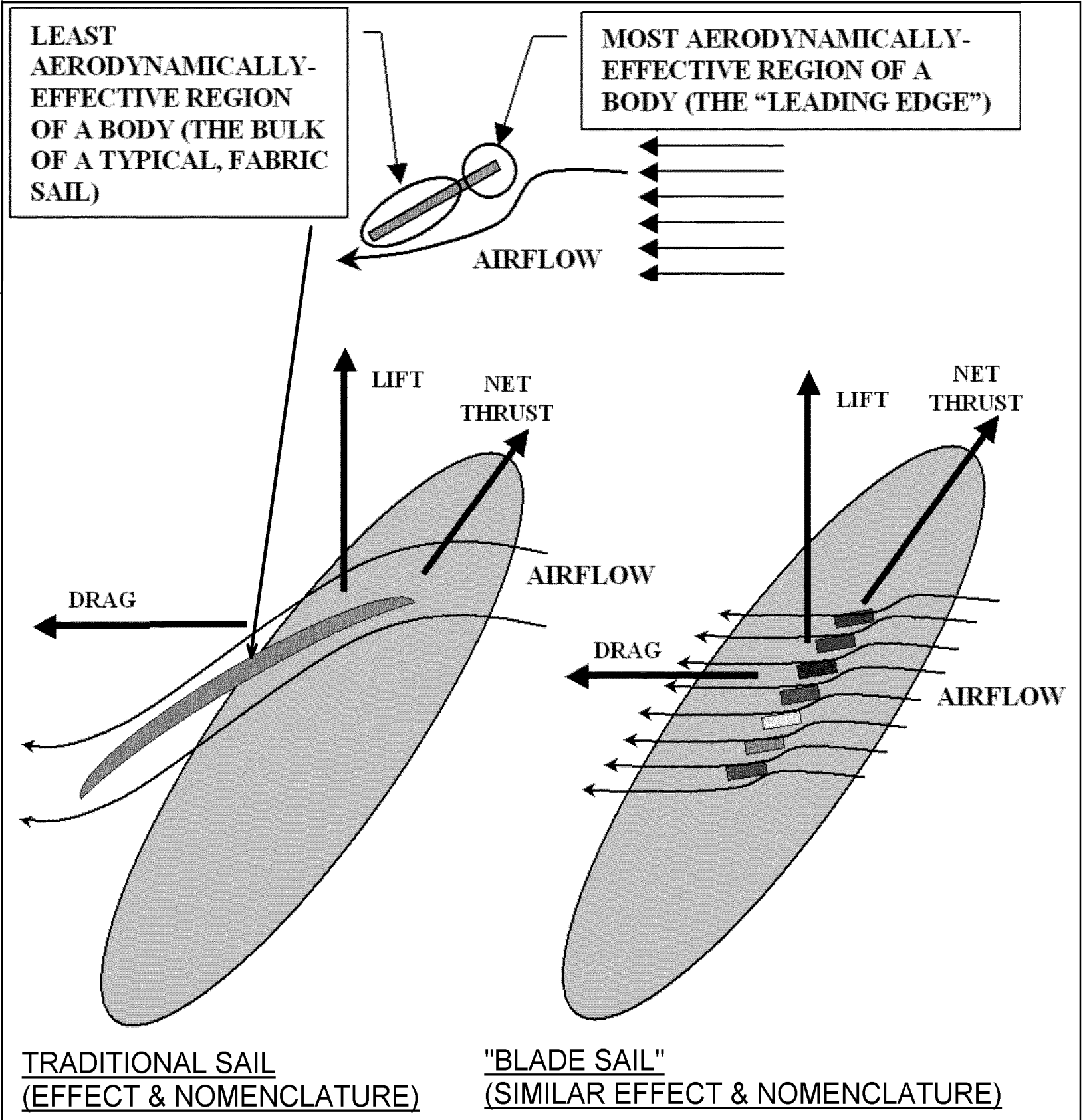
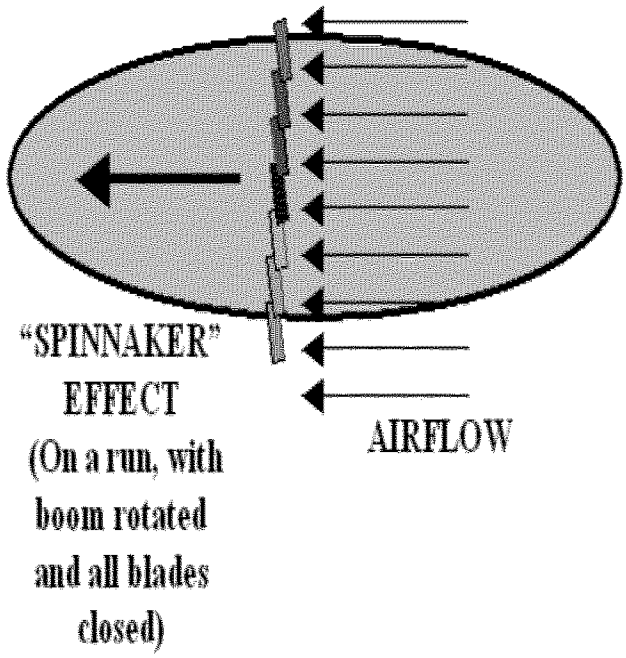
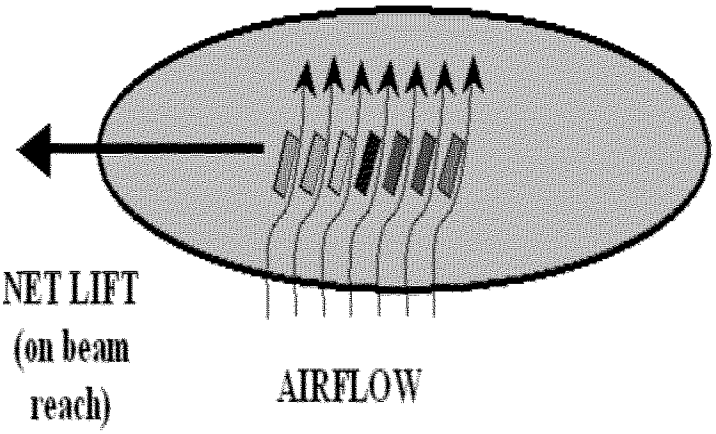
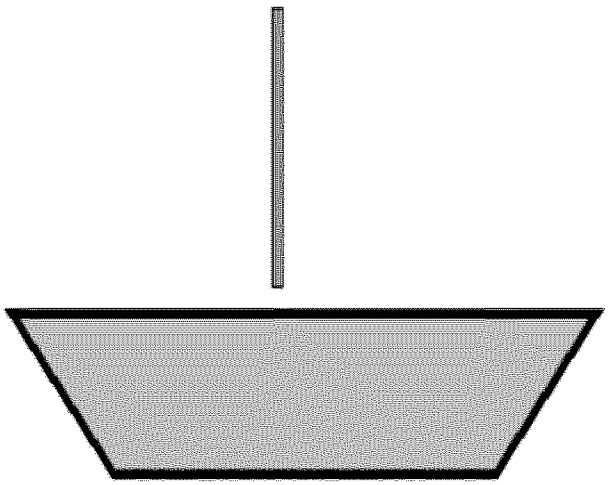
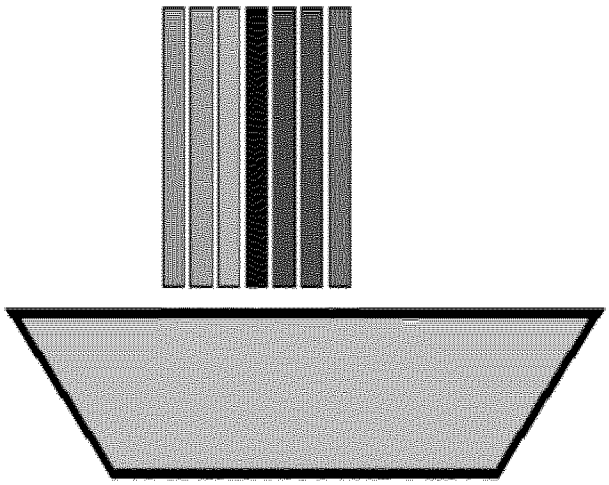


FIGURE 1: DEPICTION OF A RELATED CONCEPT OF MAXIMUM LIFT AND MINIMUM DRAG PER WETTED AREA FOR THE LEADING EDGE REGIONS OF TYPICAL BODIES IN SUBSONIC AIRFLOW (SUCH AS A HIGHER LIFT-TO-DRAG RATIO FOR THE MULTIPLE LEADING EDGES OF A BLADE SAIL vs. THE SAME SAIL AREA IN A TRADITIONAL SAIL, FOR ANY GIVEN APPARANT WIND SPEED AND DIRECTION)





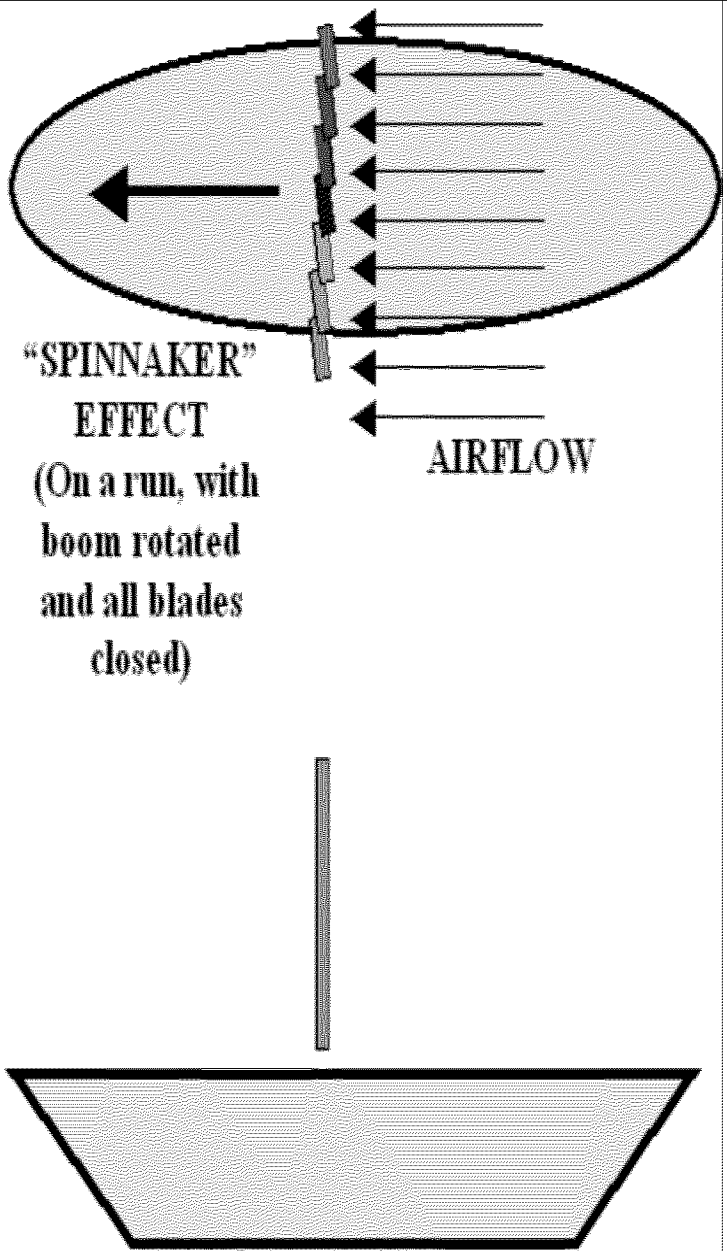




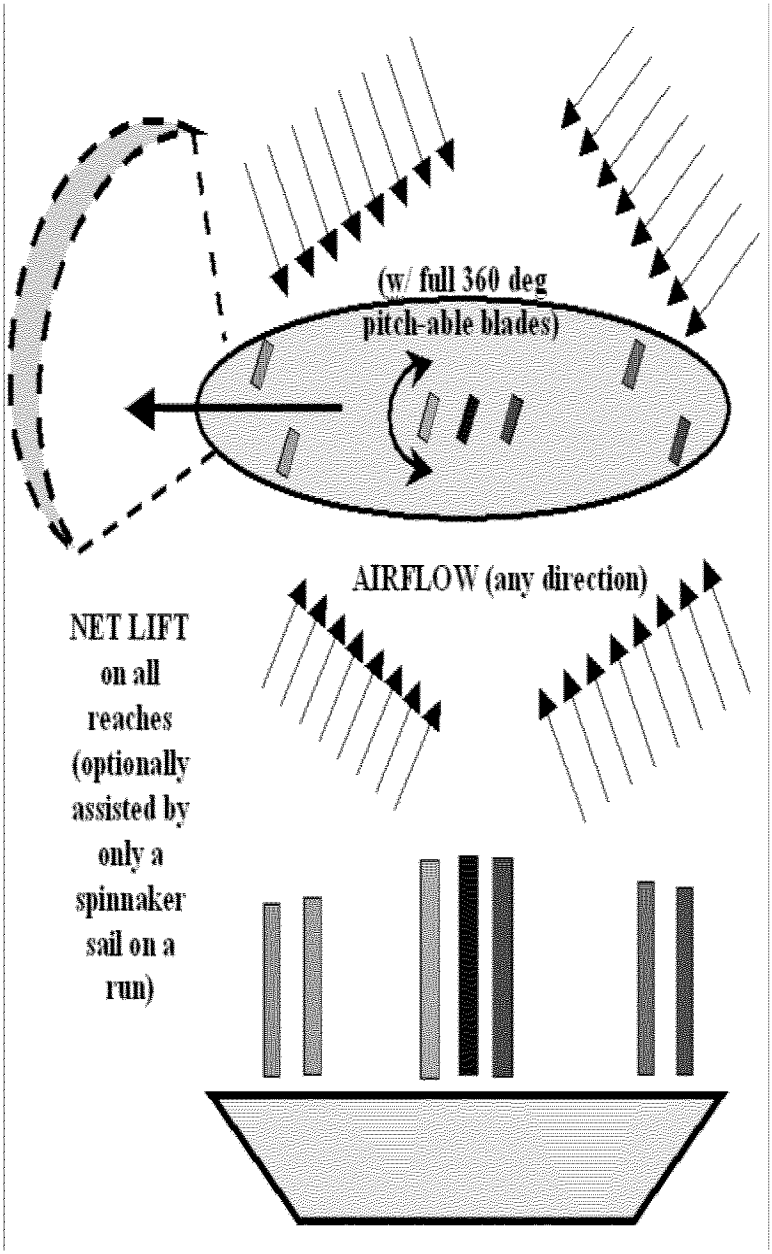
BLADE SAIL (BOOMED) SHOWN IN "RUN" POSITION

BLADE SAIL (BOOMED) SHOWN IN BEAM REACH POSITION

FIGURE 2: EXAMPLE OF MORE-EFFICIENT "BLADE SAIL" CONFIGURATION (WHERE A GREATER LIFT AND LIFT-TO-DRAG RATIO IS CREATED PER THE SAME SAIL AREA AS A TRADITIONAL SAIL - WHILE SHORTENING THE EFFECTIVE MAST HEIGHT AND ALLOWING SAFER AND MORE-EFFECTIVE TACKING, SAIL TRIM, AND THRUST CONTROL)



SAIL CONFIGURATION ON A BOOM
(SHOWN ROTATED FOR A RUN)



SAIL CONFIGURATION AS DEPLOYED
AROUND DECK (WITHOUT A BOOM)

FIGURE 3: EXAMPLE OF BOOMED vs. BOOMLESS BLADE SAIL ARRANGEMENT

(WHERE, IN EITHER CASE: A GREATER LIFT AND LIFT-TO-DRAG RATIO IS CREATED PER THE SAME SAIL AREA AS A TRADITIONAL SAIL - WHILE SHORTENING THE EFFECTIVE MAST HEIGHT AND ALLOWING SAFER AND MORE-EFFECTIVE TACKING, SAIL TRIM, AND THRUST CONTROL)

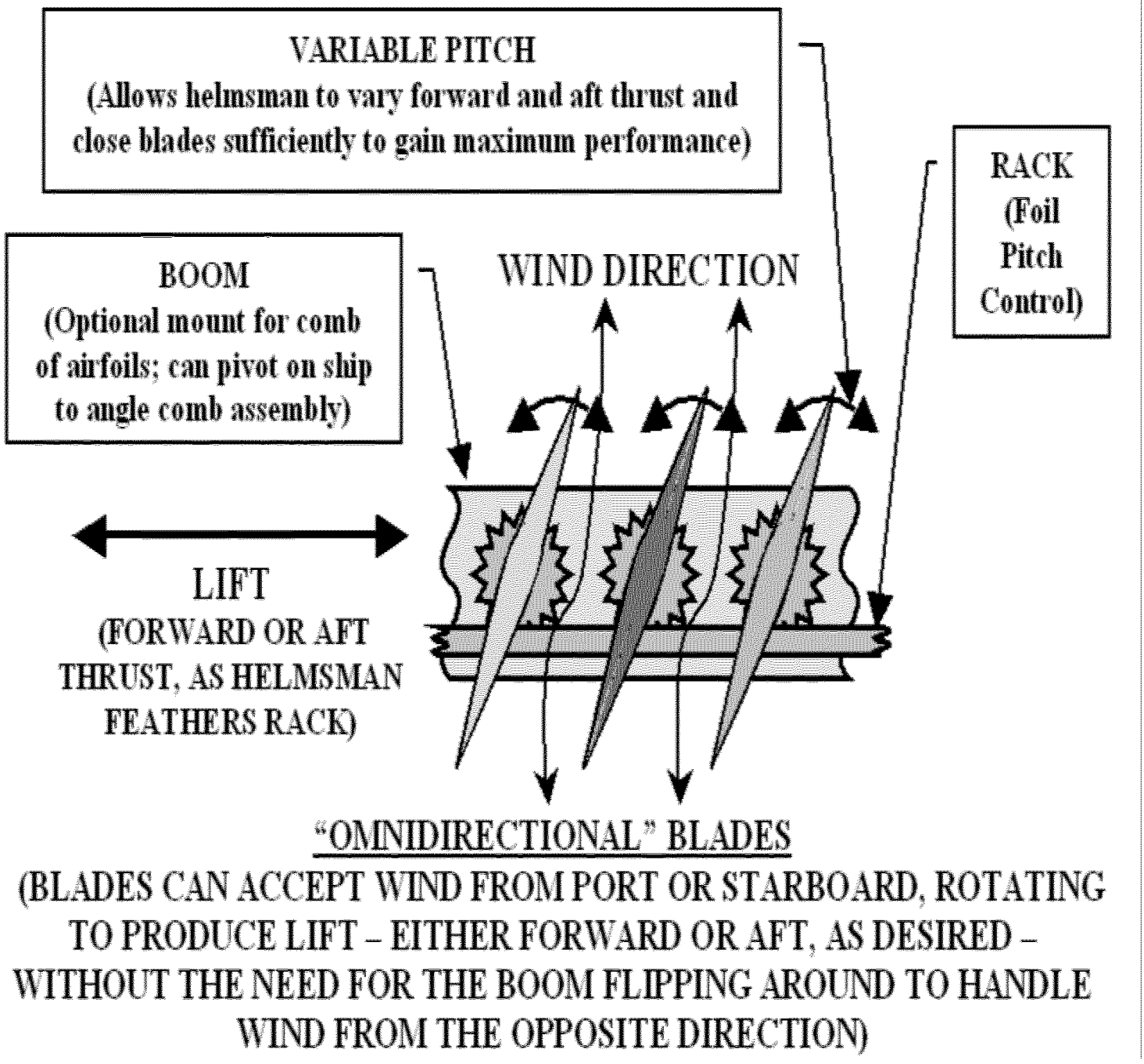


FIGURE 4: CONFIGURATION OF PREFERRED BLADE SAIL MECHANISM

(BLADES CAN BE ARRANGED CLOSE TOGETHER ON A BOOM - AS SHOWN - OR DISTRIBUTED AROUND THE DECK OF THE SHIP AND PITCH-CONTROLLED BY A CONNECTION ACROSS A NEAR-DECK-LEVEL PULLEY SYSTEM - SIMILAR TO THE CURRENT HARDWARE OF TRADITIONAL LINES & WINCHES ON A SAILBOAT)

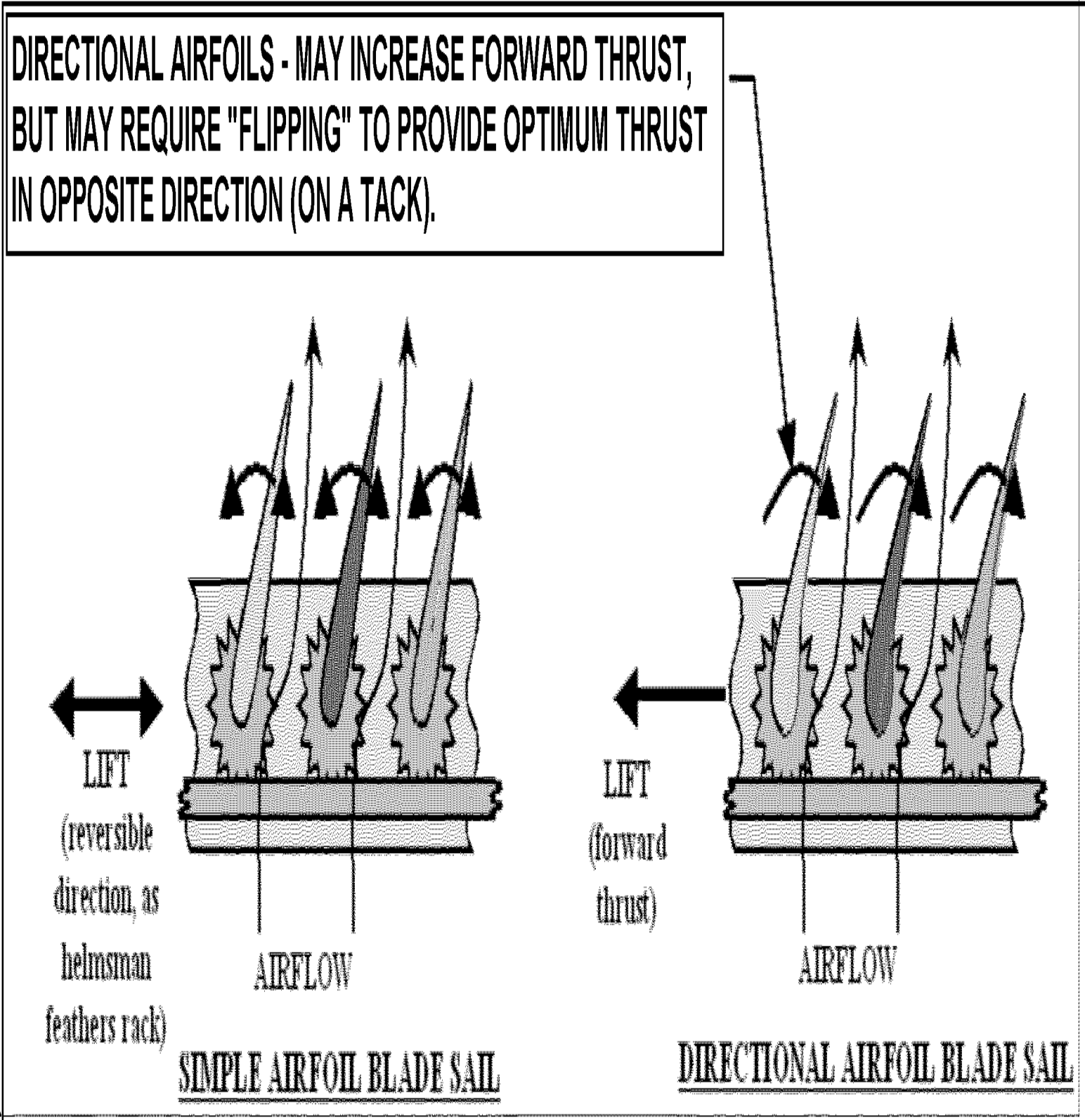
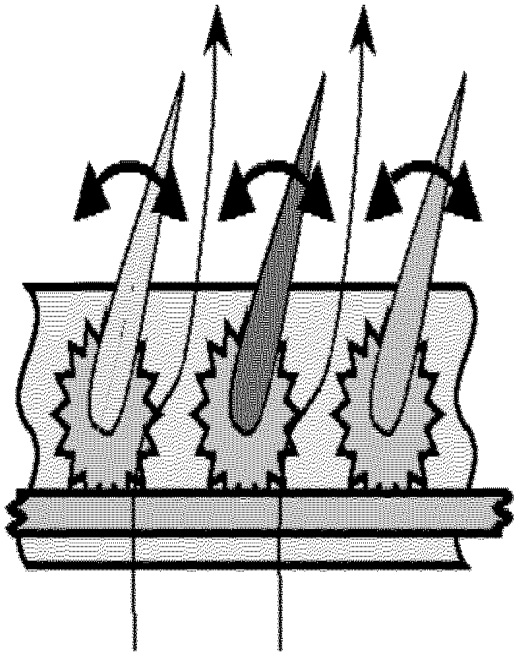
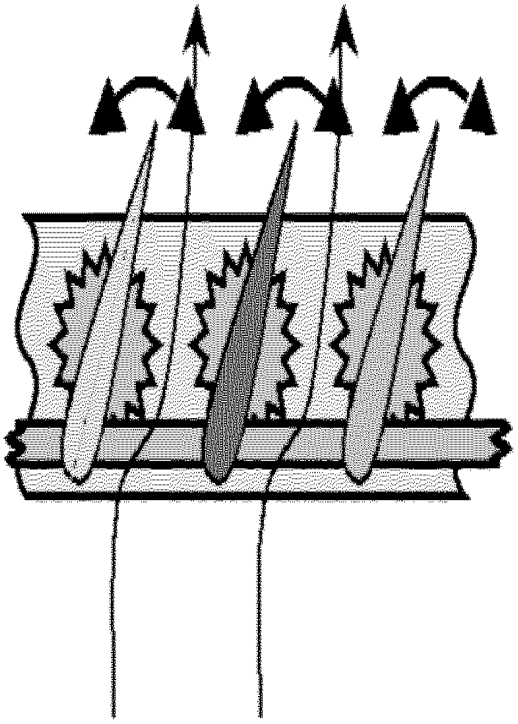


FIGURE 5: EXAMPLE OF VARIATIONS IN BLADE SHAPES (TEARDROP AND AIRFOIL, SHOWN)



"WEATHERVANING" BLADE POSITIONING
(BLADES LEEWARD OF AXLE, SO THEY RELEASE TO ZERO LIFT WHEN RACK IS RELEASED)



"NO-LOAD RACK" BLADE POSITIONING
(BLADES' CENTERS-OF-PRESSURE ARE POSITIONED ON AXLE, SO THERE IS NO BIAS TO RELEASE LIFT OF BLADES, AND NO CONSTANT LOAD ON RACK; MORE PERFORMANCE-ORIENTED – BUT LESS SAFE IN MAN-OVERBOARD CONDITION)

FIGURE 6: EXAMPLES OF VARIATIONS IN BLADE POSITIONS (WEATHERVANING AND NO-LOAD RACK, SHOWN. NOTE: CENTROID-CENTERED BLADES MAY HAVE A TENDENCY TO DRIVE TOWARD INCREASING THE ANGLE OF ATTACK, RATHER THAN RELEASING LIFT, AS THE CENTER OF PRESSURE OF ALL BODIES TENDS TO BE NEARER THE LEADING EDGE.)